



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

Joseph E. Kernan  
Governor

Lori F. Kaplan  
Commissioner

January 22, 2004

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
(317) 232-8603  
(800) 451-6027  
[www.in.gov/idem](http://www.in.gov/idem)

TO: Interested Parties / Applicant

RE: Mid-Continent Coal and Coke Company / 089-17220-00371

FROM: Paul Dubenetzky  
Chief, Permits Branch  
Office of Air Quality

## Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures  
FNPER.dot 9/16/03



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January 22, 2004

Mr. Carl Horst  
Mid-Continent Coal and Coke Company  
915 W. 175<sup>th</sup> Street  
Homewood, Illinois 60430

Re: Significant Source Modification No:  
089-17220-00371

Dear Mr. Horst:

Mid-Continent Coal and Coke Company applied for an operating permit on June 16, 1996 for a stationary metallurgical coke screening plant. An application to modify the source was received on May 5, 2003. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

- (a) Two (2) feed hoppers, constructed in 2003, each with a maximum throughput rate of 50 tons of coke per hour.
- (b) Two (2) PEP high frequency screens, constructed in 2003, each with a maximum throughput rate of 50 tons of coke per hour.
- (c) Three (3) rubber conveyor belts, constructed in 2003, each with a maximum throughput rate of 50 tons of coke per hour.
- \*(d) One (1) coke storage pile, constructed in 2003, with a maximum throughput rate of 30 tons of coke per hour.

\* Note: This unit is considered an insignificant activity as defined in 326 IAC 2-7-1(21).

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

Pursuant to Contract No. A305-0-00-36, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7871 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (800) 451-6027, and ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original Signed by Paul Dubenetzky  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

Attachments

ERG/YC

cc: File - Lake County  
U.S. EPA, Region V  
Lake County Health Department  
Northwest Regional Office  
Air Compliance Section Inspector - Rick Massoels/Ramesh Tejuja  
Compliance Data Section - Karen Ampil  
Administrative and Development - Sara Cloe  
Technical Support and Modeling - Michele Boner



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## **PART 70 SIGNIFICANT SOURCE MODIFICATION OFFICE OF AIR QUALITY**

**Mid-Continent Coal and Coke Company  
3210 Watling Street  
East Chicago, Indiana 46312**

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Significant Source Modification No.: 089-17220-00371	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: January 22, 2004





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## SECTION A

## SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1, A.3 and A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

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The Permittee owns and operates a metallurgical coke screening plant.

Responsible Official:	Manager of Operations
Initial Source Address:	3210 Watling Street, East Chicago, Indiana 46312
Source Mailing Address:	915 W. 175 <sup>th</sup> Street, Homewood, Illinois 60430
General Source Phone Number:	(708) 798-1110
SIC Code:	5052
County Location:	Lake
Source Location Status:	Nonattainment for Ozone, PM10, and SO <sub>2</sub> Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD and Emission Offset Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

### A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

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Ispat Inland, Inc. is an integrated steel mill consisting of the source and several on-site contractors:

- (a) Ispat Inland, Inc., the primary operation, owns and operates a steel mill, located at 3210 Watling Street, East Chicago, Indiana 46312 (Plant ID # 089-00316); and
- (b) Mid-Continent Coke and Coal Company, the supporting operation, owns and operates a coke screening plant, located at 3210 Watling Street, East Chicago, Indiana 46312 (Plant ID # 089-00371).

IDEM has determined that Ispat Inland, Inc. and Mid-Continent Coke and Coal Company are under common control of Ispat Inland, Inc. These two plants are considered one source due to the contractual control. Therefore, the term "source" in the Part 70 documents refers to both Ispat Inland, Inc. and Mid-Continent Coke and Coal Company as one source.

### A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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This stationary source is approved to construct and operate the following emission units and pollution control devices:

- (a) Two (2) feed hoppers, constructed in 2003, each with a maximum throughput rate of 50 tons of coke per hour.
- (b) Two (2) PEP high frequency screens, constructed in 2003, each with a maximum throughput rate of 50 tons of coke per hour.
- (c) Three (3) rubber conveyor belts, constructed in 2003, each with a maximum throughput rate of 50 tons of coke per hour.



A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities, which are specifically regulated, as defined in 326 IAC 2-7-1(21).

Emission units, not regulated by a NESHAP, with PM<sub>10</sub> and SO<sub>2</sub> emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine hundredths (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:

- (a) One (1) coke storage pile, constructed in 2003, with a maximum throughput rate of 30 tons of coke per hour.[326 IAC 6-4]

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## **SECTION B                      GENERAL CONSTRUCTION CONDITIONS**

### **B.1        Definitions [326 IAC 2-7-1]**

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

### **B.2        Effective Date of the Permit [326 IAC 13-15-5-3]**

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

### **B.3        Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]**

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### **B.4        Significant Source Modification [326 IAC 2-7-10.5(h)]**

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a)        The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b)        If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- (c)        If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d)        The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
- (e)        In the event that the Part 70 application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:
  - (1)        If the Part 70 draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Part 70 draft.
  - (2)        If the Part 70 permit has gone through final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go through a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Part 70 permit at the time of issuance.
  - (3)        If the Part 70 permit has gone through public notice, but has not gone through final EPA review and would be issued after the Significant Source Modification is

issued, then the Modification would be added to the proposed Part 70 permit, and the Title V permit will issued after EPA review.

## SECTION C

### GENERAL OPERATION CONDITIONS

#### C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

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- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

#### C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) when operation begins, including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- (d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Lake County Particulate Matter Contingency Measures [326 IAC 6-1-11.2]

The Permittee shall comply with the applicable provisions of 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures).

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

## **Compliance Requirements [326 IAC 2-1.1-11]**

### **C.8 Compliance Requirements [326 IAC 2-1.1-11]**

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The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

## **Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]**

### **C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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If required by Section D, all monitoring and record keeping requirements shall be implemented when operation begins. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

### **C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

## **Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]**

### **C.11 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]**

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- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. If a Permittee is required to have an Operation, Maintenance and Monitoring (OMM) Plan under 40 CFR 60/63, such plans shall be deemed to satisfy the requirements for a CRP for those compliance monitoring conditions. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
  - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan to include such response steps taken.

The OMM Plan shall be submitted within the time frames specified by the applicable 40 CFR60/63 requirement.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; or

- (2) If none of the reasonable response steps listed in the Compliance Response Plan or Operation, Maintenance and Monitoring (OMM) Plan; is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
  - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
  - (4) Failure to take reasonable response steps shall be considered deviation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
  - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.
  - (3) An automatic measurement was taken when the process was not operating.
  - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

**C.12 Emergency Provisions [326 IAC 2-7-16]**

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

For IDEM, OAQ:

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

For the Northwest Regional Office:

Telephone Number: 1-800-209-8892 or

Telephone Number: 219-881-6712

Facsimile Number: 219-881-6745

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management

Compliance Branch, Office of Air Quality

100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

#### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

##### **C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]**

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- (a) Records of all required monitoring data, reports and support information required by this Permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or any applicable within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

##### **C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]**

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- (a) The reports required by conditions in Section D of this permit shall be submitted to:  
  
Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015
- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.





## SECTION D.1 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

- (a) Two (2) feed hoppers, constructed in 2003, each with a maximum throughput rate of 50 tons of coke per hour.
- (b) Two (2) PEP high frequency screens, constructed in 2003, each with a maximum throughput rate of 50 tons of coke per hour.
- (c) Three (3) rubber conveyor belts, constructed in 2003, each with a maximum throughput rate of 50 tons of coke per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 PSD and Emission Offset Minor Limits [326 IAC 2-2] [326 IAC 2-3]

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset), the PM and PM10 emissions from the hoppers, screens, and the conveyors shall not exceed the emission rates listed in the table below:

Emission Units	PM Emission Limit (lbs/hr)	PM10 Emission Limit (lbs/hr)
Each Feed Hopper	0.05	0.05
Each Screen	0.25	0.25
Each Conveyor Transfer Point	0.01	0.01

This is equivalent to 2.76 tons/yr of PM and PM10 emissions. Combined with the PM and PM10 emissions from the new storage pile (fugitive emissions), the PM emissions from this modification are limited to less than 25 tons/yr, and the PM10 emissions from this modification are limited to less than 15 tons per year. Therefore, the requirements of 326 IAC 2-2 and 326 IAC 2-3 are not applicable.

#### D.1.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the hoppers, the screens, and the conveyor transfer points shall be limited to less than 44.6 pounds per hour when operating at a process weight rate of 50 tons per hour. This limit was calculated using the following equation.

Interpolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour and  
P = process weight rate in tons per hour

#### D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this facility.

## **Compliance Determination Requirements**

### **D.1.4 PM and PM10 Control**

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In order to comply with Conditions D.1.1 and D.1.2, the Permittee shall use wet suppression to control emissions of PM and PM10 from the hoppers, the screens, and the conveyors at all times these emission units are in operation. The suppressant shall be applied in a manner and at a frequency sufficient to ensure compliance with 326 IAC 2-2 and 326 IAC 6-3-2. If weather conditions preclude the use of wet suppression, the Permittee shall perform chemical analysis on the metallurgical material to ensure it has a moisture content greater than 10 percent. The method for moisture content analysis shall be approved by IDEM, OAQ.

## **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

### **D.1.5 Visible Emissions Notations**

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- (a) Visible emission notations of the exhausts from the hoppers, the screens, and the conveyor transfer points shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

## **Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

### **D.1.6 Record Keeping Requirements**

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- (a) To document compliance with Condition D.1.4, the Permittee shall maintain records of the chemical analysis of the metallurgical material, as needed.
- (b) To document compliance with Condition D.1.5, the Permittee shall maintain once per shift records of visible emission notations of the hoppers, the screens, and the conveyor transfer points.
- (c) To document compliance with Condition D.1.3, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

### PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Mid-Continent Coal and Coke Company  
Source Address: 3210 Watling Street, East Chicago, Indiana 46312  
Mailing Address: 915 W. 175<sup>th</sup> Street, Homewood, Illinois 60430  
Source Modification No.: 089-17220-00371

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.**

Please check what document is being certified:

- ? Test Result (specify) \_\_\_\_\_
- ? Report (specify) \_\_\_\_\_
- ? Notification (specify) \_\_\_\_\_
- ? Affidavit (specify) \_\_\_\_\_
- ? Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
**OFFICE OF AIR QUALITY**  
**COMPLIANCE BRANCH**  
**100 North Senate Avenue**  
**P.O. Box 6015**  
**Indianapolis, Indiana 46206-6015**  
**Phone: 317-233-5674**  
**Fax: 317-233-5967**

**PART 70 OPERATING PERMIT**  
**EMERGENCY OCCURRENCE REPORT**

Source Name: Mid-Continent Coal and Coke Company  
Source Address: 3210 Watling Street, East Chicago, Indiana 46312  
Mailing Address: 915 W. 175<sup>th</sup> Street, Homewood, Illinois 60430  
Source Modification No.: 089-17220-00371

This form consists of 2 pages

Page 1 of 2

? This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:

Date/Time Emergency was corrected:

Was the facility being properly operated at the time of the emergency?    Y    N  
Describe:

Type of Pollutants Emitted: TSP, PM-10, SO<sub>2</sub>, VOC, NO<sub>x</sub>, CO, Pb, other:

Estimated amount of pollutant(s) emitted during emergency:

Describe the steps taken to mitigate the problem:

Describe the corrective actions/response steps taken:

Describe the measures taken to minimize emissions:

If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

A certification is not required for this report.

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document for a Part 70 Significant Source Modification

#### Source Background and Description

Source Name:	Mid-Continent Coal and Coke Company
Source Location:	3210 Watling Street, East Chicago, Indiana 46312
County:	Lake
SIC Code:	5052
Operation Permit No.:	F089-17220-00371
Permit Reviewer:	ERG/YC

On August 25, 2003, the Office of Air Quality (OAQ) had a notice published in the The Times and Post Tribune, Munster and Merrillville, Indiana, stating that Mid-Continent Coal and Coke Company had applied for a Part 70 Significant Source Modification to construct some additional equipment with their existing coke screening plant using wet suppression for particulate control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

1. This metallurgical coke screening plant is a stationary source and will not move to other locations. Therefore, Condition A.2 has been revised as follows:

#### A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a metallurgical coke screening plant.

Responsible Official:	Manager of Operations
Initial Source Address:	3210 Watling Street, East Chicago, Indiana 46312
Source Mailing Address:	915 W. 175 <sup>th</sup> Street, Homewood, Illinois 60430
General Source Phone Number:	(708) 798-1110
SIC Code:	5052
<del>Initial</del> County Location:	Lake
Source Location Status:	Nonattainment for Ozone, PM <sub>10</sub> , and SO <sub>2</sub> Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD and Emission Offset Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 Source Categories



2. For Condition C.2 - Preventive Maintenance Plan, the PMP does require the certification by the responsible official and there is no local air pollution control agency at East Chicago, Indiana. Therefore, Condition C.2 has been revised as follows:

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]  
[326 IAC 1-6-3]

---

(a) . . . . .

The PMP ~~and the PMP~~ extension notification ~~does~~ not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

. . . . .

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, ~~and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit).~~ IDEM, OAQ, ~~and any applicable Local Air Pollution Control Agency (as described in Condition B.4 of this permit)~~ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

3. For source modification permits, the Permittee is not required to submit a Quarterly Deviation and Compliance Monitoring Report to IDEM. Therefore, Condition C.12(h) has been removed from the permit. IDEM also made a correction to the rule citation in C.12(e) and the Emergency Occurrence Report Form required in Condition C.12(b)(5) has been added to the end of the permit.

C.12 Emergency Provisions [326 IAC 2-7-16]

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. . .

- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(109) be revised in response to an emergency.

~~(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.~~

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE BRANCH  
100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Phone: 317-233-5674  
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

**Source Name:** Mid-Continent Coal and Coke  
Company  
**Source Address:** 3210 Watling Street, East Chicago, Indiana 46312

Mid-Continent Coal and Coke Company  
East Chicago, Indiana  
Permit Reviewer: ERG/YC

Page 3 of 6  
SSM: 089-17220-00371

**Mailing Address:** 915 W. 175<sup>th</sup> Street, Homewood, Illinois 60430  
**Source Modification No.:** 089-17220-00371

**This form consists of 2 pages**

**Page 1 of 2**

- ? This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
  - The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

**If any of the following are not applicable, mark N/A**

**Facility/Equipment/Operation:**

**Control Equipment:**

**Permit Condition or Operation Limitation in Permit:**

**Description of the Emergency:**

**Describe the cause of the Emergency:**

**If any of the following are not applicable, mark N/A**

**Page 2 of 2**

**Date/Time Emergency started:**

**Date/Time Emergency was corrected:**

**Was the facility being properly operated at the time of the emergency?**      Y      N  
**Describe:**

**Type of Pollutants Emitted: TSP, PM-10, SO<sub>2</sub>, VOC, NO<sub>x</sub>, CO, Pb, other:**

<b>Estimated amount of pollutant(s) emitted during emergency:</b>
<b>Describe the steps taken to mitigate the problem:</b>
<b>Describe the corrective actions/response steps taken:</b>
<b>Describe the measures taken to minimize emissions:</b>
<b>If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:</b>

**Form Completed by:** \_\_\_\_\_

**Title / Position:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Phone:** \_\_\_\_\_

**A certification is not required for this report.**

4. There are no stack testing requirements associated with the units permitted to construct in this Source Modification permit. Therefore, Condition C.13 - Actions Related to Noncompliance Demonstrated by a Stack Test has been removed from this permit.

~~C.13 — Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]  
[326 IAC 2-7-6]~~

- ~~(a) — When the results of a stack test performed in conformance with Section C – Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.~~
- ~~(b) — A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM,~~

~~OAQ that retesting in one hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.~~

~~———— (c) ——— IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.~~

~~———— The response action documents submitted pursuant to this condition do require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).~~

~~C.1413~~ General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

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~~C.1514~~ General Reporting Requirements [326 IAC 2-7-5(3)(C)]

---

5. Condition D.1.4 has been revised as follows to specify that the method for moisture content analysis shall be approved by IDEM, OAQ.

**D.1.4 PM and PM10 Control**

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In order to comply with Conditions D.1.1 and D.1.2, the Permittee shall use wet suppression to control emissions of PM and PM10 from the hoppers, the screens, and the conveyors at all times these emission units are in operation. The suppressant shall be applied in a manner and at a frequency sufficient to ensure compliance with 326 IAC 2-2 and 326 IAC 6-3-2. If weather conditions preclude the use of wet suppression, the permittee shall perform chemical analysis on the metallurgical material to ensure it has a moisture content greater than 10 percent. **The method for moisture content analysis shall be approved by IDEM, OAQ.**

## **Indiana Department of Environmental Management Office of Air Quality**

### **Technical Support Document (TSD) for a Part 70 Significant Source Modification**

#### **Source Background and Description**

Source Name:	Mid-Continent Coal and Coke Company
Initial Source Location:	3210 Watling Street, East Chicago, Indiana 46312
County:	Lake
SIC Code:	5052
Operation Permit No.:	089-6582-00371
Operation Permit Issuance Date:	Pending
Significant Source Modification No.:	089-17220-00371
Permit Reviewer:	ERG/YC

The Office of Air Quality (OAQ) has reviewed a modification application from Mid-Continent Coal and Coke Company (referred to as "MCCC") relating to the construction of the following emission units and pollution control devices:

- (a) Two (2) feed hoppers, constructed in 2003, each with a maximum throughput rate of 50 tons of coke per hour.
- (b) Two (2) PEP high frequency screens, constructed in 2003, each with a maximum throughput rate of 50 tons of coke per hour.
- (c) Three (3) rubber conveyor belts, constructed in 2003, each with a maximum throughput rate of 50 tons of coke per hour.
- \*(d) One (1) coke storage pile, constructed in 2003, with a maximum throughput rate of 30 tons of coke per hour.

\* Note: This unit is considered an insignificant activity as defined in 326 IAC 2-7-1(21).

#### **History**

On May 5, 2003, MCCC, a contractor to Ispat Inland, Inc., submitted an application to the OAQ requesting to add two (2) feeding hoppers, two (2) screens, and three (3) conveyors to their existing coke screening plant. The source stated that this modification will allow the them to prescreen the coke which now has a higher fines content. This modification will not result in debottlenecking or increase utilization of existing units. MCCC applied for a Part 70 permit (T089-6582-00371) on June 16, 1996 and this Part 70 permit is currently being reviewed by IDEM, OAQ.

#### **Source Definition**

Ispat Inland, Inc. is an integrated steel mill consisting of the source and several on-site contractors:

- (a) Ispat Inland, Inc., the primary operation, owns and operates a steel mill, located at 3210 Watling Street, East Chicago, Indiana 46312 (Plant ID # 089-00316); and
- (b) Mid-Continent Coke and Coal Company, the supporting operation, owns and operates a coke screening plant, located at 3210 Watling Street, East Chicago, Indiana 46312 (Plant ID # 089-00371).

IDEM has determined that Ispat Inland, Inc. and Mid-Continent Coke and Coal Company are one source under 326 IAC 2-7. These two plants are located in the same property and are considered one source due to the contractual control. Therefore, the term "source" in the Part 70 documents refers to both Ispat Inland, Inc. and Mid-Continent Coke and Coal Company as one source.

Separate Part 70 permits will be issued to Ispat Inland, Inc. and Mid-Continent Coke and Coal Company solely for administrative purpose.

### Enforcement Issue

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 5, 2003. Additional information was received on June 3, 2003.

### Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 3).

### Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	71.2
PM-10	33.9
SO <sub>2</sub>	--
VOC	--
CO	--

NO <sub>x</sub>	--
-----------------	----

### Justification for Modification

This source is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5 (f)(4)(A) as the potential to emit PM and PM10 is each greater than twenty-five (25) tons per year.

### County Attainment Status

The source is initially located in Lake County.

Pollutant	Status
PM-10	Moderate Nonattainment*
SO <sub>2</sub>	Primary Nonattainment
NO <sub>2</sub>	Attainment
Ozone	Severe Nonattainment
CO	Attainment
Lead	Attainment

\*Note: Lake County has been federally redesignated in 40 CFR 81.315 as attainment and the Air Pollution Control Board will be making the same redesignation in the state rules.

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as severe nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Lake County has been designated as nonattainment for PM10 and SO<sub>2</sub>. Therefore, PM10 and SO<sub>2</sub> emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (c) Lake County has been classified as attainment for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Fugitive Emissions  
Since this type of operation is in one of the 28 listed source categories under 326 IAC 2-2 and 326 IAC 2-3, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are counted toward determination of PSD and Emission Offset applicability.

### Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	2,016



Pollutant	Emissions (tons/year)
PM-10	2,016
SO <sub>2</sub>	3,734
VOC	1,759
CO	118,123
NO <sub>x</sub>	6,465

- (a) This existing source is a major stationary source because at least one of the regulated pollutants is emitted at a rate of 100 tons per year or more, and it is in one of the 28 listed source categories.
- (b) These emissions are based upon the 2001 emission inventory information of Ispat Inland, Inc. (Plant ID #089-00316).

#### Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
Hoppers, Screens, and Conveyors	Less than 2.76	Less than 2.76	-	-	-	-	-
*Storage Pile (fugitive)	0.08	0.04	-	-	-	-	-
Total PTE of This Modification	Less than 2.84	Less than 2.80	-	-	-	-	-
PSD and Emission Offset Thresholds	25	15	40	25	100	40	NA

\*Note: Since this source is one of the 28 source categories under 326 IAC 2-2 and 326 IAC 2-3, the fugitive particulate matter (PM) emissions from the storage pile are counted towards determination of PSD and Emission Offset applicability.

- (a) This modification to an existing major stationary source is not major because the emission increase is less than the PSD and Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-2 and 326 IAC 2-3, the PSD and Emission Offset requirements do not apply.
- (b) The PM and PM10 emissions from the this modification are limited to less than 2.84 tons/yr and 2.80 tons/yr, respectively. This is attained by the use of wet suppression to control the emissions from these new units.

#### Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this portable source.

- (b) This portable screening plant processes coke only. Coke does not meet the definition of “nonmetallic mineral” in 40 CFR 60.671. Therefore, the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants (40 CFR 60.670-676, Subpart OOO) are not applicable to this modification.
- (c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this modification.
- (d) This modification does not involve a pollutant-specific emissions unit:
  - (1) with the potential to emit before controls equal to or greater than one hundred (100) tons per year, and
  - (2) that is subject to an emission limit and has a control device that is necessary to meet that limit.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable to the units included in this modification.

#### **State Rule Applicability - Two(2) Hoppers, Two (2) Screens, and Three (3) Conveyors**

##### **326 IAC 2-2 (Prevention of Significant Deterioration (PSD))**

This source is in 1 of the 28 source categories defined in 326 IAC 2-2-1(p)(1) and has a potential to emit of PM greater than 100 tons/yr. Therefore, the existing source is a PSD major source. In order for this modification to be considered as a minor PSD modification, the PM emissions from the proposed two (2) hoppers, two (2) screens, and three (3) conveyors shall not exceed the emission rates listed in the table below:

Emission Units	PM Emission Limit (lbs/hr)
Each Feed Hopper	0.05
Each Screen	0.25
Each Conveyor Transfer Point	0.01

This is equivalent to 2.76 tons/yr of PM emissions. According to the emission calculations in Appendix A, the use of wet suppression for particulate control ensures compliance with these limits. Combined with the PM emissions from the new storage pile (fugitive emissions), the PM emissions from this modification will be limited to less than 25 tons/yr. Therefore, the requirements of 326 IAC 2-2 are not applicable.

##### **326 IAC 2-3 (Emission Offset)**

This existing source is located in Lake County (nonattainment area for Ozone and SO<sub>2</sub>) and is a major Emission Offset source. There are no VOC or SO<sub>2</sub> emissions from this modification. The potential to emit PM<sub>10</sub> before control from this modification is greater than 15 tons/yr. In order for this modification to be considered as a minor Emission Offset modification, the PM<sub>10</sub> emissions from the proposed two (2) hoppers, two (2) screens, and three (3) conveyors shall not exceed the emission rates listed in the table below:

Emission Units	PM <sub>10</sub> Emission Limit (lbs/hr)
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Each Feed Hopper	0.05
Each Screen	0.25
Each Conveyor Transfer Point	0.01

This is equivalent to 2.76 tons/yr of PM10 emissions. According to the emission calculations in Appendix A, the use of wet suppression for particulate control ensures compliance with these limits. Combined with the PM10 emissions from the new storage pile (fugitive emissions), the PM10 emissions from this modification will be limited to less than 15 tons per year. Therefore, the requirements of 326 IAC 2-3 are not applicable.

326 IAC 2-4.1 (New Sources of Hazardous Air Pollutants)

There are not HAP emissions from the proposed modification. Therefore, the requirements of 326 IAC 2-4.1 are not applicable.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity for sources located in Lake County shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements)

This source is collocated with Ispat Inland, Inc., which is one of the sources listed under 326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements). However, there is no specific PM10 requirement for this coke screening plant.

326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations)

This source is located in Lake County. However, the potential to emit PM of the proposed feed hoppers, screens and conveyors do not have the potential to emit PM greater than 100 tons/yr and actual PM emissions greater than 10 tons/yr. Therefore, the requirements of 326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations) are not applicable to this modification.

326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures)

This source is located in Lake County and has the potential PM10 emissions greater than 10 tons/yr. Therefore, this source is subject to the requirements of 326 IAC 6-1-11.2.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of the hoppers, the screens, and the conveyor transfer points shall not exceed 44.6 pounds per hour when operating at a process weight rate of 50 tons per hour. This limit was calculated using the following equation.

Interpolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40$$

where E = rate of emission in pounds per hour and

P = process weight rate in tons per hour

According to the emission calculations in Appendix A, the PM emissions from each of the hoppers, the screens, and the conveyor transfer points are less than the emission limit above. Therefore, the hoppers, the screens, and the conveyors are in compliance with 326 IAC 6-3-2.

### **State Rule Applicability - Storage Pile (Insignificant Activity)**

#### **326 IAC 6-4 (Fugitive Dust Emissions)**

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

#### **326 IAC 6-5-1 (Fugitive Particulate Matter Emission Limitations)**

This source is located in Lake County and the potential to emit fugitive particulate matter from the storage pile is less than 25 tons per year. Therefore, the requirements of 326 IAC 6-5-1 are not applicable.

#### **326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements)**

This source is located in Lake County and the potential to emit fugitive particulate matter from the proposed storage pile is less than 5 tons per year. Therefore, the requirements of 326 IAC 6-1-11.1 are not applicable.

### **Compliance Requirements**

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

1. The hoppers, the screens, and the conveyors have applicable compliance monitoring conditions as specified below:

Visible emissions notations of the exhausts from the hoppers, the screens, and the conveyor transfer points shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to

cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring conditions are necessary because the hoppers, the screens, and the conveyors must operate properly to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset), and 326 IAC 6-3-2 (Manufacturing Processes).

## **Conclusion**

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 089-17220-00371.

**Appendix A: Emission Calculations**  
**PM10 Emissions**  
**From the Feeders, Screens and Conveyors**

**Company Name: Mid-Continent Coke and Coal Company**  
**Address: 3210 Watling Street, East Chicago, IN 46312**  
**SSM #: 089-17220-00371**  
**Reviewer: ERG/YC**  
**Date: June 11, 2003**

Maximum Throughput Rate:

**50** (tons/hr)

Process	Number of Units	Uncontrolled PM10 Emission Factor (lbs/ton)	Uncontrolled PTE of PM10 (lbs/hr/unit)	Uncontrolled PTE of PM10 (tons/yr)	Controlled PM10 Emission Factor (lbs/ton)	Controlled PTE of PM10 (lbs/hr/unit)	Controlled PTE of PM10 (tons/yr)
*Feed Hoppers	2	0.0043	0.215	1.88	0.000430	0.022	0.19
**Screens	2	0.071	3.550	31.1	0.002100	0.105	0.92
**Conveyor Transfer Points	3	0.0014	0.070	0.92	0.000048	0.002	0.03
<b>Total</b>				<b>33.9</b>			<b>1.14</b>

\* The uncontrolled emission factor for the feeder is the one for low silt batch drop from iron and steel mill in AP-42, Table 12.5.4 (10/86). The controlled emission factor is calculated assuming 90% control by wet suppression.

\*\* The uncontrolled and controlled emission factors for the screens and the conveyor transfer points are from AP-42, Chapter 11.19, Table 11.19.2-2 - Crushed stone processing operations (AP-42 01/95). The controlled emission factors reflect water suppression.

### Methodology

Uncontrolled Emissions (lbs/hr/unit) = Maximum Throughput (tons/hr) x Uncontrolled Emission Factor (lb/ton)

Uncontrolled Emissions (tons/yr) = Uncontrolled Emissions (lbs/hr/unit) x Number of Units x 8760 hr/yr x 1 ton/2000 lbs

Controlled Emissions (lbs/hr/unit) = Maximum Throughput (tons/hr) x Controlled Emission Factor (lbs/ton)

Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr/unit) x Number of Units x 8760 hr/yr x 1 ton/2000 lbs

**Appendix A: Emission Calculations**  
**PM Emissions**  
**From the Feeders, Screens and Conveyors**

**Company Name: Mid-Continent Coke and Coal Company**  
**Address: 3210 Watling Street, East Chicago, IN 46312**  
**SSM #: 089-17220-00371**  
**Reviewer: ERG/YC**  
**Date: June 11, 2003**

Maximum Throughput Rate:

**50** (tons/hr)

Process	Number of Units	Uncontrolled PM Emission Factor (lbs/ton)	Uncontrolled PTE of PM (lbs/hr/unit)	Uncontrolled PTE of PM (tons/yr)	Controlled PM Emission Factor (lbs/ton)	Controlled PTE of PM (lbs/hr/unit)	Controlled PTE of PM (tons/yr)
*Feed Hoppers	2	0.0088	0.440	3.85	0.000880	0.044	0.39
**Screens	2	0.1491	7.455	65.3	0.004410	0.221	1.93
**Conveyor Transfer Points	3	0.00294	0.147	1.93	0.000101	0.005	0.07
<b>Total</b>				<b>71.1</b>			<b>2.38</b>

\* The uncontrolled emission factor for the feeder is the one for low silt batch drop from iron and steel mill in AP-42, Table 12.5.4 (10/86). The controlled emission factor is calculated assuming 90% control by wet suppression.

\*\* The uncontrolled and controlled emission factors for the screens and the conveyor transfer points are from AP-42, Chapter 11.19, Table 11.19.2-2 - Crushed stone processing operations (AP-42 01/95). The controlled emission factors reflect water suppression. Assume all TSP emissions equal to PM emissions and the TSP emission factors can be estimated by multiplying PM10 emission factors by 2.1.

### Methodology

Uncontrolled Emissions (lbs/hr/unit) = Maximum Throughput (tons/hr) x Uncontrolled Emission Factor (lb/ton)

Uncontrolled Emissions (tons/yr) = Uncontrolled Emissions (lbs/hr/unit) x Number of Units x 8760 hr/yr x 1 ton/2000 lbs

Controlled Emissions (lbs/hr/unit) = Maximum Throughput (tons/hr) x Controlled Emission Factor (lbs/ton)

Controlled Emissions (tons/yr) = Controlled Emissions (lbs/hr/unit) x Number of Units x 8760 hr/yr x 1 ton/2000 lbs

**Appendix A: Emission Calculations**  
**PM/PM10 Emissions**  
**From the Coke Storage Pile (Fugitive Emissions)**

**Company Name: Mid-Continent Coke and Coal Company**  
**Address: 3210 Watling Street, East Chicago, IN 46312**  
**SSM #: 089-17220-00371**  
**Reviewer: ERG/YC**  
**Date: June 11, 2003**

**1. Emission Factors:**

According to AP42, Chapter 13.2.4 - Aggregate Handling and Storage Piles, the emission factor of PM for aggregate handling process can be estimated from the following equation:

$$Ef = \frac{.0032 \times (U/5)^{1.3} \times k}{(M/2)^{1.4}}$$

where:

Ef = Emission Factor (lbs/ton)	
k = Particle size multiplier =	0.74 for PM and 0.35 for PM10
U = Mean wind speed (mph) =	12 mph
M = Moisture content (%) =	12 % (provided by the source)

Therefore,

PM Emission Factor =	0.0006 lbs/ton process
PM10 Emission Factor =	0.0003 lbs/ton process

**2. Potential to Emit PM/PM10 before Control:**

Throughput Rate: 30 tons/hr

**Potential PM =** 30 ton/hr x 0.0006 lbs/ton x 8760 hr/yr x 1 tons/2000 lbs = **0.08 tons/yr**

**Potential PM10 =** 30 ton/hr x 0.0003 lbs/ton x 8760 hr/yr x 1 tons/2000 lbs = **0.04 tons/yr**